

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

PUBLICATION NUMBER : 09188509  
PUBLICATION DATE : 22-07-97

APPLICATION DATE : 12-01-96  
APPLICATION NUMBER : 08003636

**BEST AVAILABLE COPY**

APPLICANT : NEC CORP;

INVENTOR : YOSHIKAWA HIDEKI;

INT.CL. : C01B 31/02 D01F 9/127

TITLE : PRODUCTION OF MONOLAYER CARBON NANOTUBE

ABSTRACT : PROBLEM TO BE SOLVED: To provide a method for producing monolayer carbon nanotube, enabling its continuous production over a long time.

SOLUTION: The objective monolayer carbon nanotube can be synthesized stably over a long time by using electrodeless high-frequency plasma without, in principle, any variation in plasma situation due to electrode exhaustion as observed in arc discharge process. Besides, formation of amorphous carbon and/or graphite as impurities can be suppressed without decreasing the yield of the aimed carbon nanotube by feeding the peripheral area of the high-frequency plasma with hydrogen gas to etch carbon and/or argon gas to rapidly drop gas temperature independently of raw material feed.

COPYRIGHT: (C)1997,JPO